Effect of Activist Investing on Stock Returns in the Restaurant Industry

Research Thesis

Finance and Economics in the Fisher College of Business at The Ohio State University

By

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Abstract

According to Bloomberg, fourteen percent of large firms in the restaurant industry (market capitalization greater than $100mm) have activist shareholders. These investors' goal is to drive shareholder value, but whether activist investors accomplish this goal is unclear. The purpose of my research is to determine whether activist investors create lasting value in the restaurant industry by streamlining organizational efficiency, or whether they ultimately destroy shareholder value through cost cutting and firm restructurings. The methodology used involved examining stock return data from public firms in the restaurant industry that have been targeted or taken over by activists and comparing these returns to the returns of the industry overall. The stock prices from each company were analyzed over four different time horizons including: (1) a year before the announcement of activist involvement; (2) ten days before and ten days after the announcement of activist involvement; (3) a year after the announcement; and (4) up to present day. This methodology allows us to see how effective these activist investors have been at creating value. If value has been created, the stock price will have gone up when compared to the overall industry. If value has been destroyed, the stock price will have declined. The results indicate that four of the ten firms analyzed showed higher long-term returns than the overall restaurant industry index, and these firms that have outperformed the index have done so by an average margin of forty percent. However, forty-five percent of companies have seen negative returns since an activist's involvement was announced. This data suggests that activist shareholders' methods are creating mixed results with some big hits and a fair amount of missed targets. This research provides a framework for future research that could shed additional light on the impact of activists in other industries and adds to the current debate regarding the effect of activist investors in the financial markets. As firms like Bob Evans and Bravo Brio currently engage with activists, it is clear that these investors are not leaving this market anytime soon.

Acknowledgements

I would like to thank my faculty advisor John Barker and program director Patricia West for their aid in the creation of this research. Without their guiding hand showing me the way I would not have been able to complete this research. Both served as tremendous advisors throughout the entire process and always were more than willing to help with any trouble that I came across. I would also like to thank my peers in the Honors Contract program at The Ohio State University's Fisher College of Business. Their help in editing and providing feedback along the way for my project proved to be crucial to the final product.

Vita

Hudson High School…….....2013

The Ohio State University……...……..2017

Fisher College of Business, Specialization: Finance

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Chapter 1: Introduction to Activist Investing

Activist investing has been a hot button topic in the financial markets for years. As activist investors continue to affect the global marketplace and business structure in the United States, their overall effect on companies is still largely in question. Activist investors take ownership in a company that they "target", which is usually one that has been struggling, is sitting on cash, or needs to be restructured. Historically, these investors encourage and, if they have a large enough ownership, demand that companies raise their dividends, cut costs, and increase stock buybacks. Their main purpose is to create value for investors. However, what are the ultimate costs of these decisions?

The debate regarding these controversial investors has two different perspectives. On one side, activist investors are criticized for being short-term focused and not helping to promote long-term success. Most notably, their focus on restructuring, share buybacks, and dividend payouts usually means that the companies that they are controlling have to spend more money on satisfying shareholders than investing in innovation and development. Many economists argue that this will eventually lead to lower job creation, lost economic demand, lower firm value, and, ultimately, weaken the overall economy.

On the other side of this debate, activist investors are being hailed as capitalistic masters of market efficiency. By cutting costs, activist investors improve firm efficiency. Much of this change is brought about through flattening the organizational structure, removing unnecessary positions, and analyzing the entire corporate structure and balance sheet for inefficiencies. Activist investors, in essence, help "trim the fat" in American companies. Analysts who follow this school of thought also believe that investors will

then take their extra dividends and equity and return that back into the economy by investing in other companies, or spending money in the American marketplace. This, they would argue, helps improve the economy and strengthens companies by increasing efficiency and forcing companies to consolidate for the betterment of their investors.

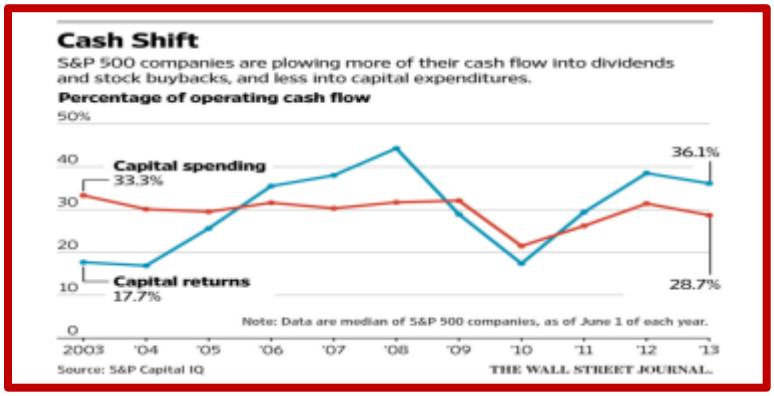
The idea behind shareholder and investor activism follows a fairly basic concept. Underperforming company's stock price will be driven down due to the poor performance and under-utilization of company resources. This means that outside investors, or current investors, will be able to buy these shares for cheaper, and in doing so grow their ownership of the company. This will allow these "activists" to gain such a large holding that they have a substantial amount of input into the company's endeavors and can even go on to try and hold a board seat. Then, once they have their position and have the power to control the company, these activists look to improve business functions and drive up share value. This profits them as shareholders in the company, and also helps grow the business.

The restaurant industry in particular is a very active market in terms of activist investors. This is for many reasons. For one, restaurants are usually conglomerates of many different types of smaller "businesses". Structurally, restaurant chains are composed of many different asset classes. The fast-food and fast-casual restaurants that activists have shown a particularly high level of interest in are usually made of at least two main pieces. One of these pieces being the brand and the food itself. For instance, there is a certain amount of value that is held by a large restaurant chain like Bob Evans or Wendy's. Consumers are familiar with the brand and their signature items. Secondly,

these restaurant chains usually have massive real estate holdings as well. When you are a restaurant chain that is nationally recognized you will usually have hundreds of real estate holdings in each state, along high ways, and even internationally. Many of these buildings are in urban settings like downtown New York, which prove to be especially valuable, however just the sheer amount of buildings that these companies own is sometimes enough to warrant the real estate portion of the company to be spun off. Some of these chains also have "side brands" that they hold under the parent company as well. For instance, Bob Evans has their main restaurants but then also sell their gravy and some breakfast specialties in the frozen sections of many grocery stores. An activist looks at these different asset classes and may think that by dividing up these different holdings, the company could ultimately create more value for the shareholders. This is one, of many ways, that an activist investor may want to change a company that they have a holding in, but it is especially profound in the restaurant arena.

Figure 1 (below) shows the effect that activist investors have had on the overall marketplace so far. Taken from the Wall Street Journal, it shows that since 2003, capital returns to investors have more than doubled, while capital spending has dropped five percentage points. This is a drastic change that highlights how activist investors may want companies to spend their money versus how the executives may want to spend. It is clear that the priorities of companies are shifting as investors and shareholders benefit and long-term investment in capital spending is cut.

Figure 1:

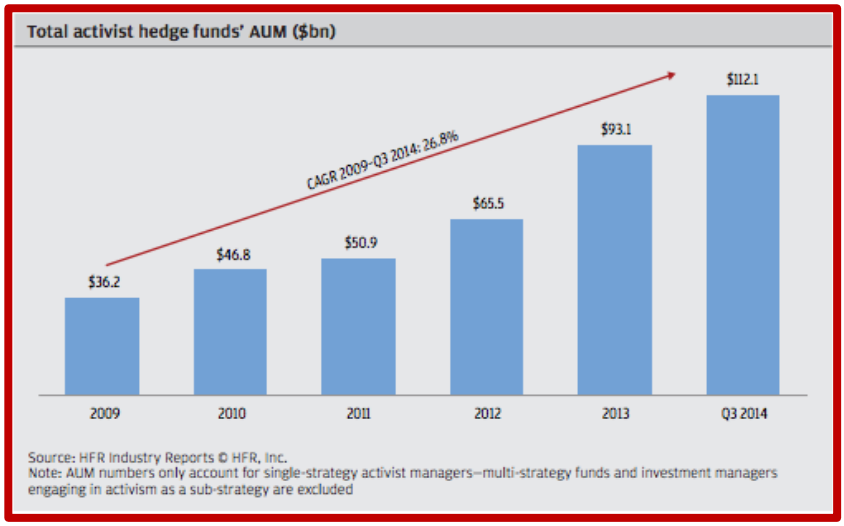


http://www.wsj.com/articles/companies-send-more-cash-back-to-shareholders-1432693805

As the activist investing movement continues to grow and take shape, investors and economists alike are trying to predict what the long-term effect of these corporate marauders will be. How will these changes in firm spending and actions affect the overall economy, employment levels, growth, wages, and, more specifically, each individual firms long-term outlook? These questions are all still up in the air, but the restaurant industry offers us a potential glimpse into the future due to the high concentration of activist activity and composition of the firms.

In today's marketplace, activist investing does not show any signs of slowing. Figure 2 from J.P. Morgan's "The Activist Revolution" shows how the dollar amount of assets under management for activist hedge funds has seen steady growth since 2009. As the number of activist funds and resources available to activists continue to grow, it is clear that the effect of these activists will only continue to magnify and intensify in the coming years.

Figure 2:



https://www.jpmorgan.com/jpmpdf/1320693986586.pdf

Throughout the rest of this document, you will find my research problem and a literature review covering prior research conducted. This will be followed by my hypotheses and predictions for my research where I will lay out my specific variables and the constructs that I will be using to analyze them. I will then move into my methodology, research results, and, lastly my ideas for further research.

Chapter 2: Research Problem

My research will be focusing on the effects of these investors on stock returns within the fast food and fast casual restaurant industry. While research regarding activist investors effect on stock prices has been done in the past, I plan on specifically focusing on restaurant chains and parent companies that have been targeted by activists. My data collection will focus on firms that have had varying degrees of activist involvement. Some of these firms will have only recently had activist involvement while others may have had an activist investor contributing to their business for years. I will be looking to see how these firms have performed since the activists announced their involvement within the firm. This will offer insight into how these investors have been able to alter these companies, and if they have been successful in doing so (as measured by firm stock price)

This research will help publicly-traded companies make investment decisions and weigh the pros and cons of allowing activist investors into their boardrooms. It will also allow the markets to better estimate the value that will be derived within the fast food/ fast casual restaurant industry, or other industry with similar characteristics, when an activist investor gets involved in a firm. Lastly, it will show companies the effects of shorter term activist involvement versus the long-term effects.

Either way, this research will help companies decide the best course of action when confronted with a potential activist takeover.

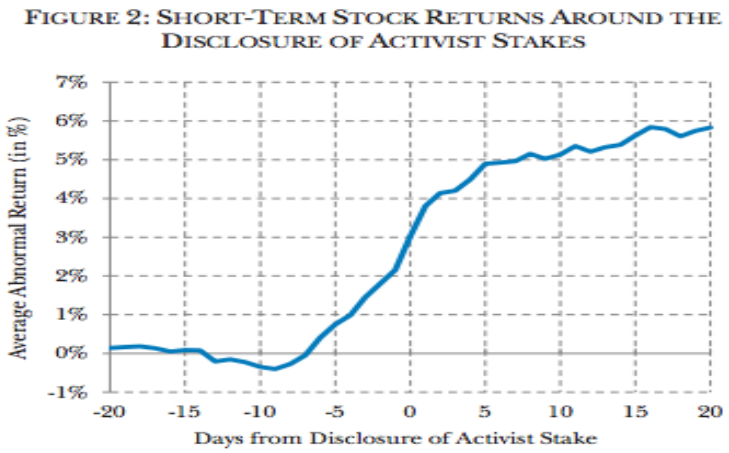
Chapter 3: Literature Review

Research regarding the effects of activist investors has shown that adding activist investors into the equation leads to increased company stock buybacks, increased dividends, and lowered investment in long-term growth solutions. This research has shown that, as the activist investor movement has strengthened, company spending has shifted significantly. One report from the Wall Street Journal notes that S&P 500 companies spent over 36% of their cash flows on stock buybacks in the past year, up from 18% in 2003. Over that same time period, spending on plants and equipment has decreased almost 4% (Monga, Benoit, Francis). In an interview with the Wall Street Journal, Blackrock CEO Laurence Fink stated, "More and more corporate leaders have responded with actions that can deliver immediate returns to shareholders, such as buybacks or dividend increases, while underinvesting in innovation, skilled workforces or essential capital expenditures necessary to sustain long-term growth" (Monga, Benoit, Francis). Moody's Investors Service Data also shows that the median percentage of cash spent on dividends rose to 11.9% of earnings, from 9.4% in 2013 (Monga Benoit, Francis). The data shows a general trend in the way that companies are spending their cash. However, what does this do to the ultimate returns for these companies? Will this lead to higher stock prices, or lower stock prices? What is the ultimate value gained or lost by these actions?

Activist research has reflected the general disagreements surrounding this controversial topic as well. Bebchuk, Brav, and Jiang's "The Long-Term Effects of Hedge Fund Activism" collected 2000 cases from 1994-2007 and looked at the effect that

activist investors had five years after their intervention. Ultimately, they concluded from their data that there was no evidence to back the claim that activist investors had a negative effect on stock prices. Instead, they found that stock prices initially had a spike upon the announcement of an activist takeover, and that this initial spike was correctly reflecting the long-term returns of the investment. This initial spike is shown in their research on page 1122 and is shown as Figure 4:

Figure 4:



To analyze if these initial returns would reverse, the researchers used the CAPM and the Fama French Four Factor Model to analyze alphas (stock returns that are not explained through movements throughout the market). This group reached the conclusion that in the five-year period post-activist takeover, these firms did not face falling stock returns, but instead had positive stock returns above the market. This information can be shown by the positive alphas shown in Figure 5:

Figure 5:

Panel A: CAPM Alphas

	Holding Period (in Months)		
	[-36,-1]	[+1,+36]	[+1,+60]
Median	-0.25	0.49	0.65
Average	-0.17	0.52	0.44
Standard Deviation	2.73	2.99	2.62
t-stat	-2.42	6.13	6.11
Observations	1478	1264	1294

Panel B: Four-Factor Alphas

	Holding Period (in Months)		
	[-36,-1]	[+1,+36]	[+1,+60]
Median	-0.40	0.25	0.40
Average	-0.28	0.33	0.23
Standard Deviation	2.90	3.31	2.91
t-stat	-3.65	3.55	2.81
Observations	1478	1264	1294

To gather their cases, this group collected 13D SEC filings, which are the mandatory SEC filings that must be submitted in the event of an activist takeover.

Activist investors are also having an impact on sales general and administrative expenses that companies are undertaking, as well as on employment numbers. In Brav, Jiang and Kim's "The Real Effects of Hedge Fund Activism: Productivity, Asset Allocation, and Labor Outcomes" they find that firms see changes in many key employment metrics when activist investors get involved. Their research found that total hours worked dropped 7.3% two years after an activist became involved in the firm. Over this same time period, labor productivity increased by 8.4%. Productivity-adjusted per-hour wages decreased by 7.3% from the year of activist involvement to three years after activist involvement. The research also showed that both number of workers, and number of hours worked per worker decreased after an activist became involved. Ultimately, this

research suggests that when activists become involved in firms, hours and wages are cut in most cases, while productivity rises.

Chapter 4: Hypotheses and Predictions

The main variable being measured in my research is:

- Stock Returns for restaurants/chains with activist involvement compared to stock returns for restaurants/chains with no activist involvement
- Independent Variable= Time before/after announcement of activist involvement
- Dependent Variable(s)= Stock returns over the different time intervals

Measurements of performance and activist "success":

- Stock returns= (Closing Stock Value- Opening Stock Value)/(Opening Stock Value)
- Covariant 1= Menu ETF (tracks the performance of the restaurant industry as a whole)
- Covariant 2= Five firms returns over the same time intervals that did not have activist involvement and are also in the fast food/ fast casual restaurant industry

What constitutes an activist investor?

- "A minority shareholder who seeks to influence decision making at a company by voicing concerns, engaging in a dialogue with management, or lobbying other shareholders for support. The demands could relate to changes in management, representation on the board, acquisitions, salaries, bonus payments, use of retained earnings, etc." - The Financial Dictionary.com
- For the purpose of this research, I will define an activist investor as:
    - An individual who has been labeled "activist investor" by the financial community/ media

- An individual who participates in proxy fights with board of directors
- An individual looking to change basic functions/ operations of a company through stock ownership

Case Collection and Specific Characteristics for Prime Candidates

- Companies with "activist takeover" as determined by activist characteristics listed above
- Must be a publicly traded company

Predictions:

- For times between the 10 days before announcement and 10 days post announcement:
  - I believe that the stock price will see a large jump upon the announcement of activist involvement. I predict the stock price will be highest for this period on the day of the announcement, and will stay up through the 10 days post announcement.
- For times between 1 year before the announcement and 1 year after the announcement:
  - I believe that the stock price will be up one year after the announcement as compared to one year before the announcement. Activist investors tend to target struggling companies so the stock price may not be in good shape one year before the announcement. Also, the one year post announcement horizon is short enough that the long-term effects of the announcement and involvement will not be realized yet.

- For times between the announcement to 1 year after the announcement:
    - I predict that there will be a positive alpha when compared to the overall market for the restaurants that have been targeted by activist investors.
- When compared with Menu ETF returns:
    - I believe that activists will beat the Menu ETF returns over a one year period, but after that time frame has passed will be beat by the industry average.
- When compared to the control firms in the industry that did not have any activist involvement:
    - I believe that activists will outperform firms that did not have any activist involvement over the different time intervals being studied.

Chapter 5: Methodology

To collect the data necessary for my research, I first had to pinpoint which firms I would focus on. To do this, I wanted to take a look at firms in the restaurant industry that had been involved with activist investors in the past. These firms had to all be publicly traded companies so that their company information and stock prices were readily available. To collect the company data, I used multiple different accredited news sources. I also used these same resources to make note of the selected firms' stock prices:

- 1 year before the announcement of activist involvement
- 10 days before the announcement of activist involvement
- At the date of activist involvement
- 10 days after the announcement of activist involvement
- 1 year after the announcement of activist involvement

After this, I also collected the stock price for all of the selected firms on November 29, 2016- the date that my research collection ended. Along with the stock information, I also included the hedge fund or activist, the size of their holding, the dates of board seats being given to the activist, and lastly made note of what the activists value proposition was for the firm. After I collected the important dates, activists involved, their holdings, and stock prices at the specified dates, I analyzed how stock returns had been effected by the involvement of an activist within a firm. By measuring the activists' ability to drive value through stock returns, I will be able to evaluate how successful these investments had been for both the company and the investor. As had been shown by the prior

research, these activists change the ways that companies spend. If this new spending is effective, the stock returns would be expected to increase, if it is not, their share price would drop.

The returns from the data collected around firms with activist investing was then compared to an ETF of the restaurant industry as a whole. The Menu ETF tracks the overall performance of publicly traded stocks within the restaurant industry. If the firms with activist investors had seen higher returns than the ETF over the different time periods, then it would be clear that companies with activist involvement outperform the industry. By looking at the stock returns from the firm 10 days prior to the announcement of activist involvement and 10 days after the announcement of activist involvement, I was able to measure how the markets reacted to the news of the activist. If the stock price went up, it would mean that investors thought that activists would be able to drive value within the firm. If the stock price dropped, it would be clear that investors did not feel that the activists would be able to drive effective change within the organization. The next step in the process was to compare the stock price one year before the announcement to the stock price both at the announcement and one year after the announcement. This allows a look at the longer-term effects of the activist. If the share price grew substantially one year after the announcement than it had grown one year prior to the announcement than the positive effect of the activist would be seen. After this, I noted the stock price on November 29, 2016, the last day of my data collection. This date serves as the common ending date from which all current firm stock prices will be taken. From

here we can see what kind of returns these activists have seen over a longer stretch of time.

Along with the comparison to the Menu ETF, I also compared the stock returns of companies with activist investors to the returns of companies without activist investors. I compiled a list of five companies in the fast-food/ fast casual that were also publicly traded. I measured the returns for each of these 5 firms over the same dates that I measured those firms with activist investors involved. This allowed me to pair each of the firms with activist involvement with the mean returns of the five firms that did not have activist investors over the same time periods. By using pairings to match the appropriate time intervals I was able to see if the firms with activist involvement outperformed those firms without activist involvement. Once I had the mean returns for the five firms with no activist involvement from 10 days before announcement of activist involvement to 10 days after announcement and one year before announcement of activist involvement to one year after, I ran a t-test to compare these returns to the returns of the firms with activist investors to see if there was any significant difference in the two groupings returns.

An analysis from the date of the announcement of the activist to one year after the announcement was done to measure the alphas of the targeted companies when compared to the S&P 500 as a whole. For each firm, the monthly returns where gathered by looking at historical stock data for the adjusted close price of the selected stocks. This price incorporates all stock splits and dividends. The monthly risk-free rate was then subtracted from these monthly returns. The same process was then performed for the S&P 500 index

as a whole (monthly returns where gathered over the same dates as they were for the targeted firms with activists, and then the risk-free rate for these months was subtracted out). Once the returns where found, a regression was run to see if there was any difference in the returns for the overall market and the S&P 500. This regression provided the alphas for each firm, which measures the difference between the returns by the individual companies and the overall market. It also provided the betas, which is a measure of systematic risk. Beta looks at how correlated the firm specific stock prices are with the overall market prices. A beta of 1 would mean that the market and the stock are perfectly correlated. A beta of .5 would mean that the stock is 50% less volatile than the overall market.

Chapter 6: Data Analysis

For my analysis I focused on key stock returns for each firm over different time intervals:

1) Stock return from 1 year before activist announcement to 1 year after announcement
2) Stock return 1 year before activist announcement to Nov. 29, 2016
3) Stock return from the date of activist announcement to Nov. 29, 2016
4) Stock return from the date a board seat was acquired to Nov. 29, 2016
5) Stock return from the date of activist announcement to 10 days after
6) Stock return from 10 days prior to activist announce to 10 days post

	Price 1 Year Before to 1 Year After Announcement	Stock Price 1 Year Before Announcement to Now	Stock Price @ Announcement to Stock Price Today	Stock Price @ Board Seat to Now	Stock Price @ Announcement to 10 Days After	Stock Price 10 Days Prior to Announcement to 10 Days Post
Jamba 1	2%	-33%	-19%	-37%	-3%	11%
Jamba 2	17%	-13%	-20%	-37%	7%	2%
Yum Brands	6%	16%	-4%	28%	-2%	14%
Cracker Barrel	27%	229%	238%	293%	-4%	-3%
Chipotle	-	-46%	-10%	-4%	-9%	4%
Buffalo Wild Wings	-	0%	14%	-	14%	10%
McDonald's	35%	297%	262%	-	0%	-1%
Wendy's	70%	5%	-23%	-26%	-2%	2%
Bob Evans	27%	18%	-23%	-7%	-3%	-1%
Darden Restaurants	18%	56%	40%	68%	-2%	3%
BJ's Restaurant	76%	29%	13%	24%	2%	27%

These returns were then compared with the returns of the Menu ETF, whose returns were taken on an annual basis (measured on January 1st of each year).

Below is the t-test that was run comparing the returns from firms with activist involvement to those without from 10 days before an activist's involvement was announced to 10 days after.

t-Test: Paired Two Sample for Means

	W/ Activist	*W/O Activist*
Mean	2.101818182	-2.018181818
Variance	172.3310564	103.4803964
Observations	11	11
Pearson Correlation	0.673862149	
Hypothesized Mean Difference	0	
df	10	
t Stat	1.395815141	
P(T<=t) two-tail	0.192985549	
t Critical two-tail	2.228138852	

Below is the t-test that was run comparing the returns from firms with activist involvement to those without from 1 year before an activist's involvement was announced to 1 year after. Only 9 samples were used for this analysis due to timeframe limitations.

t-Test: Paired Two Sample for Means

	W/ Activist	*W/O Activist*
Mean	8.793333333	16.18666667
Variance	44.339	59.407275
Observations	9	9
Pearson Correlation	0.550540988	
Hypothesized Mean Difference	0	
df	8	
t Stat	-3.227215546	
P(T<=t) two-tail	0.012107434	
t Critical two-tail	2.306004135	

The conclusions that we can draw from these t-tests are limited due to the small sample size. A true correlation between activist investor involvement and positive or negative stock returns cannot be found. Instead we can see that there does seem to be a difference between the returns from stocks with activists and stocks without.

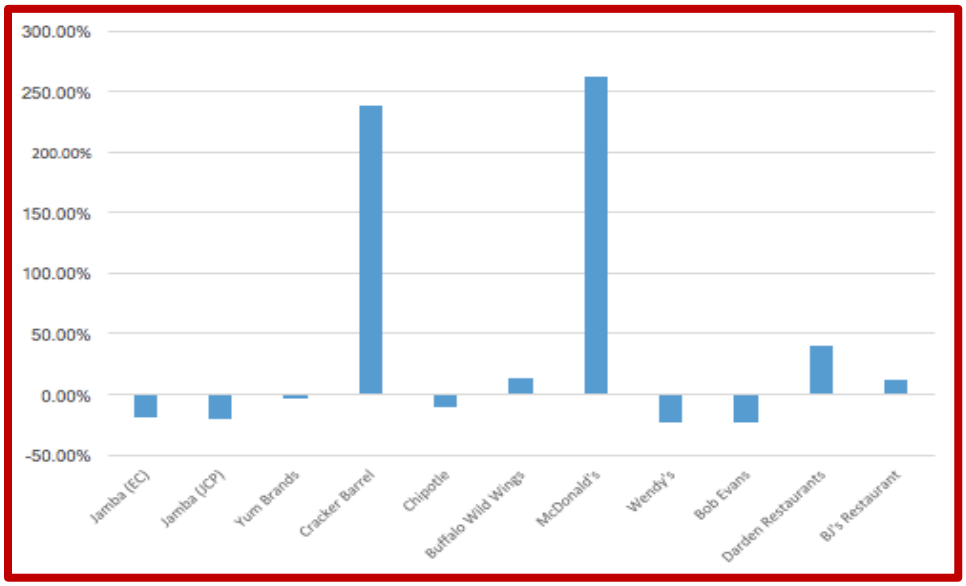
Looking first at the t-test measuring stock returns for firms 10 days before activist announcement to 10 days after, we can see that the mean returns between these two different groups over this time interval were 2.1% for firms with activists, and -2.01% for firms without activists. This suggests that these firms with activists had higher returns around the date of activist announcement that were not seen by other firms within the same industry. Ultimately, it seems that firms within the fast-food/ fast casual industries do see a jump in their stock prices when an activist investor's involvement in the company is announced that is not seen in other firms over the same time period. This test gave a t-statistic of 1.396, however no significance can be proven due to the small sample size.

When looking at the t-test measuring the stock returns of firms 1 year before the announcement of activist involvement and 1 year after the announcement of activist involvement, we find a difference in the stock return changes between those firms that did have activist involvement and those firms that did not. In this case, the mean return for firms with activist involvement was 8.7933% while the return for firms without activist involvement was 16.1866%. This gave a t-statistic of -3.227. While we cannot derive significance from this test due to the small size of the sample, we can note the differences between the two samples. This seems to suggest that firms without activist investors actually outperformed those firms who had activists driving business decisions. Perhaps this means that these "market makers" and "masters of economic efficiency" do not drive as much value as the market expects.

Analyzing the regressions between the individual stocks and the market revealed an average alpha of .0126 for 9 firms that had return data for up to a year after the announcement of activists. This is a 1.2 basis point difference between the market and firms in the restaurant industry that had activists involved. On average, the restaurants that had activist investors involved outperformed the S&P 500 by 1.2 basis points from the date of the announcement of the activist to one year after the announcement. The average beta was .527, showing that the firms with activist investors were, on average, about 48% less volatile than the S&P 500 as a hole over this time period. This shows that perhaps activist investors do drive some value, however, due to the sample size, no conclusions can be drawn.

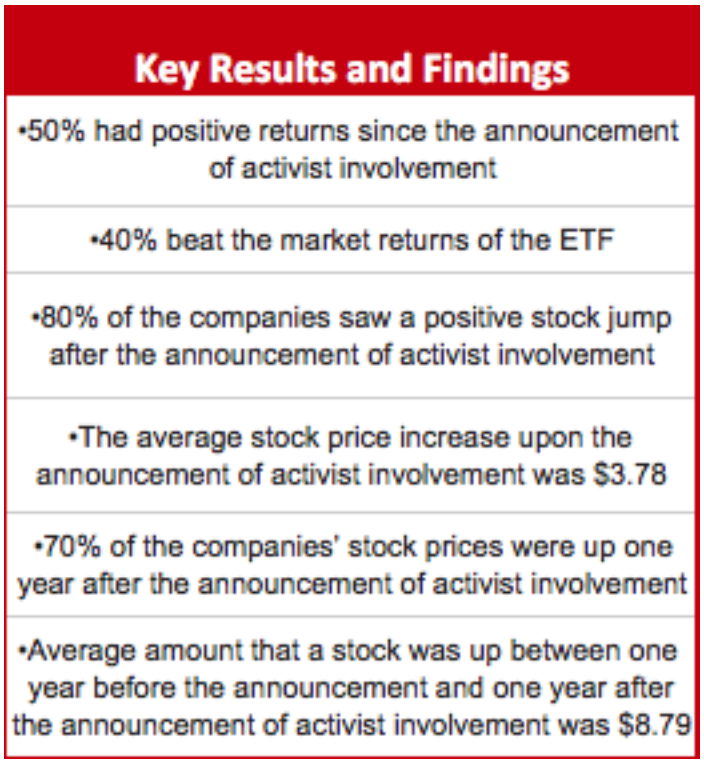
Chapter 7: Results

Below is a chart showing the returns since the announcement of activist involvement to November 29, 2016. As can be seen, half of the cases actually showed negative returns. However, there have been two huge successes in McDonald's and Cracker Barrel. This seems to show that while activist engagement does not always end up creating value, when they are able to create the synergies and efficiencies that they expect, the returns can be massive.



When looking at the above chart, it is important to recognize that these returns have not been seen over the same time frames. The two longest examples of firms with activist involvement from the data are McDonald's (which has the highest returns of any of the firms) and Wendy's. Both of these firms had their starts with activists in 2005. The two shortest timeframes for firms with activist involvement in the data are Chipotle and Buffalo Wild Wings, who got their start with activists in 2016.

The following table highlights the key findings from the data:



(*The returns of the Menu ETF were measured on an annual basis on Jan. 1st of each year)

When looking at the regressions it is important to note that the alpha for the individual stock when compared to the S&P 500 is listed as the intercept in the chart and the beta is listed as the x-variable.

BJ's Restaurant Regression

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.55157839
R Square	0.30423872
Adjusted R Square	0.240987695
Standard Error	0.110133557
Observations	13

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.058342663	0.058342663	4.810020365	0.050686492
Residual	11	0.133423405	0.0121294		
Total	12	0.191766068			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.026120395	0.033231268	0.786018598	0.448457746	-0.047021133	0.099261922	-0.047021133	0.099261922
X Variable 1	2.309062796	1.052839782	2.193175863	0.050686492	-0.008221939	4.625347532	-0.008221939	4.626347532

Darden Restaurant Regression

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.084293883
R Square	0.007105459
Adjusted R Square	-0.083157681
Standard Error	0.072905973
Observations	13

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.000418416	0.000418416	0.078719382	0.784247062
Residual	11	0.05846809	0.005315281		
Total	12	0.058886506			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.009228213	0.020247994	0.455759366	0.657428585	-0.035337322	0.053793748	-0.035337322	0.053793748
X Variable 1	0.165690655	0.590550681	0.280569746	0.784247062	-1.134102631	1.46548394	-1.134102631	1.46548394

Bob Evan's Regression

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.035721878
R Square	0.001276053
Adjusted R Square	-0.089517034
Standard Error	0.074325212
Observations	13

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	7.76405E-05	7.76405E-05	0.014054512	0.907767737
Residual	11	0.060766608	0.005524237		
Total	12	0.060844249			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	-0.010531941	0.02621636	-0.401731607	0.695576515	-0.068233761	0.04716988	-0.068233761	0.04716988
X Variable 1	0.180316253	1.520992183	0.118551729	0.907767737	-3.16736497	3.527997477	-3.16736497	3.527997477

Wendy's Regression

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.63821964
R Square	0.407324309
Adjusted R Square	0.3534447
Standard Error	0.044382438
Observations	13

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.014891492	0.014891492	7.55989736	0.018906647
Residual	11	0.021667809	0.001969801		
Total	12	0.036559302			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.016831722	0.012876298	1.307186367	0.217813929	-0.01150882	0.045172263	-0.01150882	0.045172263
X Variable 1	1.437766404	0.522914135	2.749526752	0.018906647	0.286840152	2.588692656	0.286840152	2.588692656

McDonald's Regression

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.495725243
R Square	0.245743517
Adjusted R Square	0.177174745
Standard Error	0.042878054
Observations	13

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.006589096	0.006589096	3.583898505	0.084933405
Residual	11	0.020223803	0.001838528		
Total	12	0.026812899			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.01037955	0.012149597	0.854312306	0.411151489	-0.016361532	0.037120632	-0.016361532	0.037120632
X Variable 1	1.020288199	0.538945702	1.893118725	0.084933405	-0.165923292	2.205499691	-0.165923292	2.206499691

Cracker Barrel Regression

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.610695169
R Square	0.372948589
Adjusted R Square	0.315943915
Standard Error	0.049381405
Observations	13

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.015953846	0.015953846	6.542421259	0.026621974
Residual	11	0.026823755	0.002438523		
Total	12	0.042777601			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.021475784	0.01380711	1.555414868	0.148131122	-0.00891346	0.051865027	-0.00891346	0.051865027
X Variable 1	0.950962286	0.371786864	2.55781572	0.026621974	0.132664915	1.769259658	0.132664915	1.769259658

YUM! Brands Regression

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.176577955
R Square	0.031179774
Adjusted R Square	-0.056894792
Standard Error	0.070939101
Observations	13

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.001781533	0.001781533	0.354015644	0.563887917
Residual	11	0.055355916	0.005032356		
Total	12	0.057137449			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.005800698	0.019688334	0.294626164	0.773765305	-0.037533033	0.049134429	-0.037533033	0.049134429
X Variable 1	0.273170697	0.459116482	0.594992138	0.563887917	-0.737337867	1.283679262	-0.737337867	1.283679262

Jamba Regression (Engaged Capital)

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.217418951
R Square	0.047271
Adjusted R Square	-0.039340727
Standard Error	0.083690651
Observations	13

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.003822716	0.003822716	0.545780595	0.475515239
Residual	11	0.077045375	0.007004125		
Total	12	0.080868091			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.027595346	0.024111832	1.144473228	0.276720088	-0.025474438	0.08066513	-0.025474438	0.08066513
X Variable 1	-0.879485214	1.190472855	-0.73876965	0.475515239	-3.499698302	1.740727874	-3.499698302	1.740727874

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.084193886
R Square	0.00708861
Adjusted R Square	-0.083176061
Standard Error	0.085321551
Observations	13

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.00057169	0.00057169	0.078531393	0.784497584
Residual	11	0.080077439	0.007279767		
Total	12	0.080649129			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.006785789	0.023800295	0.285113643	0.78085371	-0.045598307	0.059169884	-0.045598307	0.059169884
X Variable 1	0.201306339	0.718349509	0.280234533	0.784497584	-1.379770269	1.782382947	-1.379770269	1.782382947

Chapter 8: Future Research

Potential future research includes:

- Using this framework of data collection and analysis to look at other industries
- Combining these results with the results of other industries to increase the sample size and potentially derive statistical significance which could aid in finding the overall market effect of activist investors on stock returns
- Measure the differences in capital allocation, employment numbers, and dividend yields for the firms included in this study to see what type of changes the firms saw internally when an activist investor became involved
- Dive deeper into why McDonald's and Cracker Barrel have been such successful endeavors and what separates these two activist campaigns from the others
- Continue to collect data on the observed stocks to see how the alphas change as time moves further away from the original announcement of activist involvement

References

The activist revolution: Understanding and navigating a new world of heightened investor scrutiny (2015). J.P. Morgan.

Bebchuk, L. A., Brav, A., & Jiang, W. (2015). The long-term effects of hedge fund activism. *Columbia Law Review, 115*(5), 1085-1155.

Benoit, D., & Monga, V. (2015). **Are activist investors helping or undermining american companies? journal examines 71 campaigns at big companies, finds runaway winners, a few duds**. *Wall Street Journal Online,* , February 1, 2016.

Berman, D. K. (2015). **A radical idea for activist investors; what if the goal were more investment with an eye on the long term?**, 02/01/2016.

Brav, A., Jiang, W., & Kim, H. (2015). The real effects of hedge fund activism: Productivity, asset allocation, and labor outcomes
. *Rev. Financ. Stud.* , 02/02/2016.

Monga, V., Benoit, D., & Francis, T. (2015). Monga, V., benoit, D., & francis, T. (2015, may 27). firms send more cash back to shareholders --- activists push for returns, fueling worries about long-term investment.
. *Wall Street Journal Online,* 02/01/2016.